

Schlumberger

Schlumberger Technology Corporation
1325 S Dairy Ashford, Rm 5012
Houston, TX 77077
281-285-6262

Date: March 27, 2014

State of New Mexico
Oil Conservation Division
District 2 - ARTESIA
811 S. First St.
Artesia, NM 88210

Attention: T.C. Shaffert

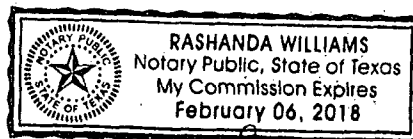
Company Name: Occidental Perminian LTD
Well Name: McHam 34 State 004
County: Eddy
State: New Mexico
API number: 30-015-41233

Enclosed please find the original copy of the Continuous Direction Survey performed by Schlumberger Wireline & Testing and Data Services, divisions of Schlumberger Technology Corporation (P-5 No. 754900). The Continuous Directional Survey was calculated from GPIT Survey data, and processed by Elizabeth Rosborough, PetroTechnical Services located in DS-Houston. Information required by your office is as follows:

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Elizabeth Rosborough Geology Tech	1	0 ft – 5280 ft	Mar. 27, 2014	GPIT

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address or call (281) 285-6262.

Elizabeth Rosborough
Elizabeth Rosborough
Geology Tech
Enclosures



Rashanda Williams

Schlumberger

GEOFRAME PROCESSED INTERPRETATION

Certified Directional Survey

0' MD - 5280' MD

*A Mark of Schlumberger

Using the following logs: GPIT-F

COMPANY:	Occidental Permian LTD		
WELL:	McHam 34 State 004		
FIELD:	Yeso		
County:	Eddy		
State:	New Mexico		
COUNTRY:	USA		
Date Logged:	23-Mar-2014	Date Processed:	27-Mar-2013
Well Location:	2105' FNL & 2233' FEL		
Elevations:	KB: 3692ft	DF: 3691ft	GL: 3678ft
API Number:	30-015-41233	Job Number:	DSP-2014-09953

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The well name, location and borehole reference data were furnished by the customer.

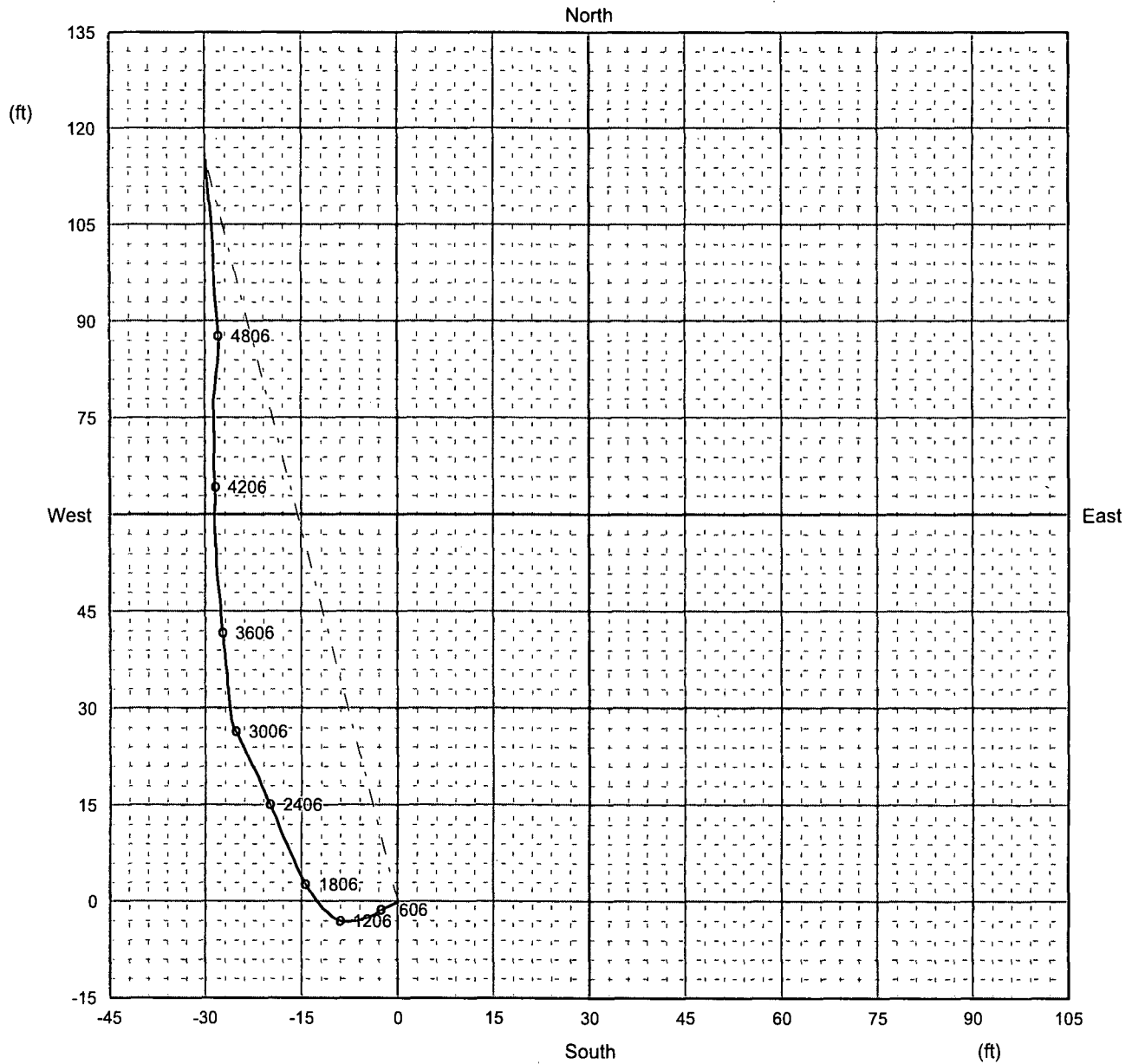
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording:	Location:	Roswell, NM	Software Version:	20C0-999	Engineer:	Ken Rood
Office Recording:	ICS Center:	Houston	Baseline:		Log Analyst:	E. Rosborough
Mud and Borehole Measurements:						
Rm @ Measured Temperature:	0.04ohm.m	@ 70.5degF	BHT:	104.4degF	Bitsize:	7.875in
Rmf @ Measured Temperature:	0.03ohm.m	@ 70.5degF	Type Fluid in Hole:		WATER	
Rmc @ Measured Temperature:		@ 68degF	Mud Density:	9.9lbm/gal		

Remarks:

0' MD - 400' MD in Casing...Assumed Vertical
GPIT Data Good at 406' MD
Grid Convergence Angle = 0.455 deg

McHam 34 State 004



Projection on Horizontal Plane

Horizontal scale 1 in : 25 ft

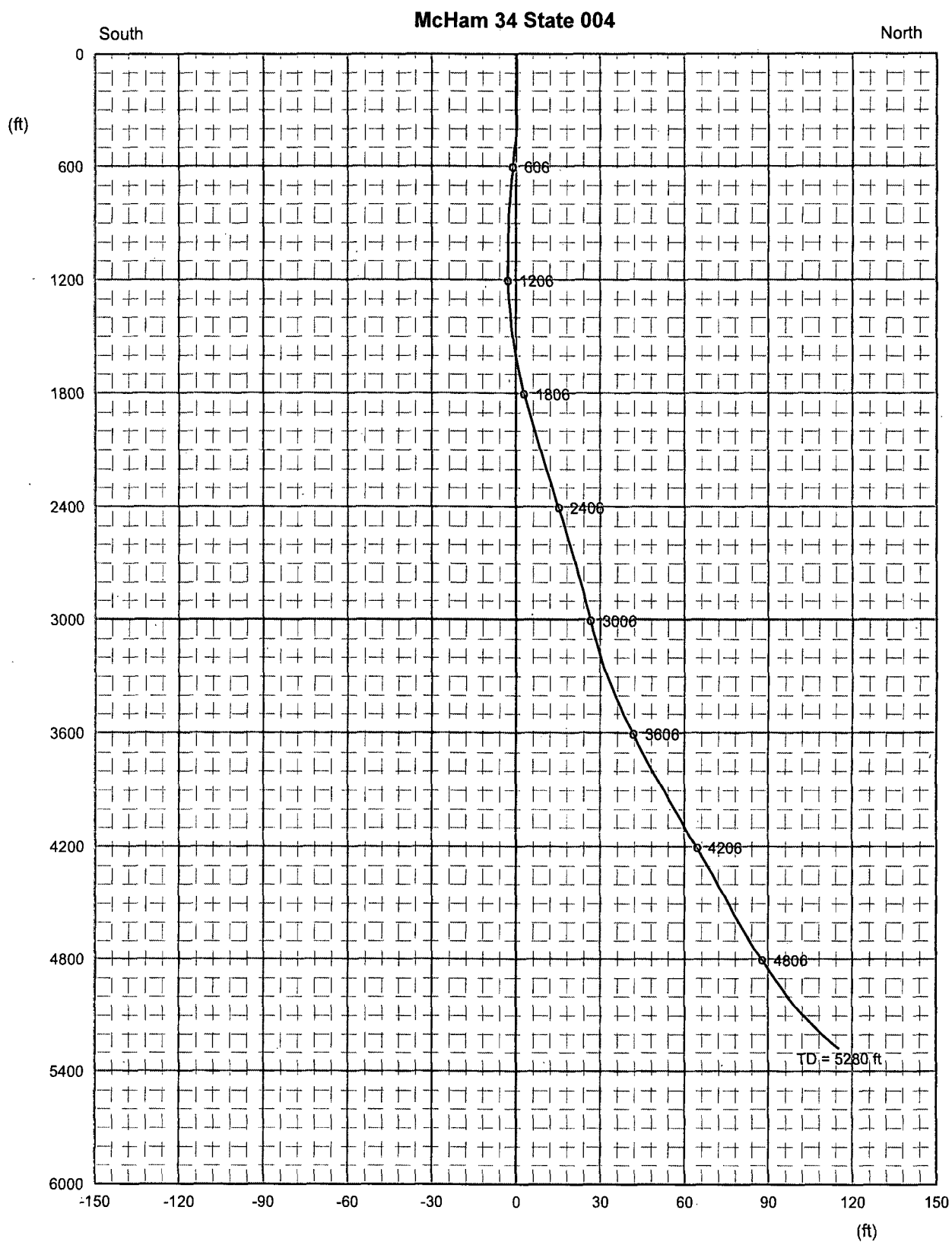
Minimum Curvature Method

Tie In Location

Measured Depth	400.00	ft
True Vertical Depth	400.00	ft
Distance North	0.00	ft
Distance East	0.00	ft

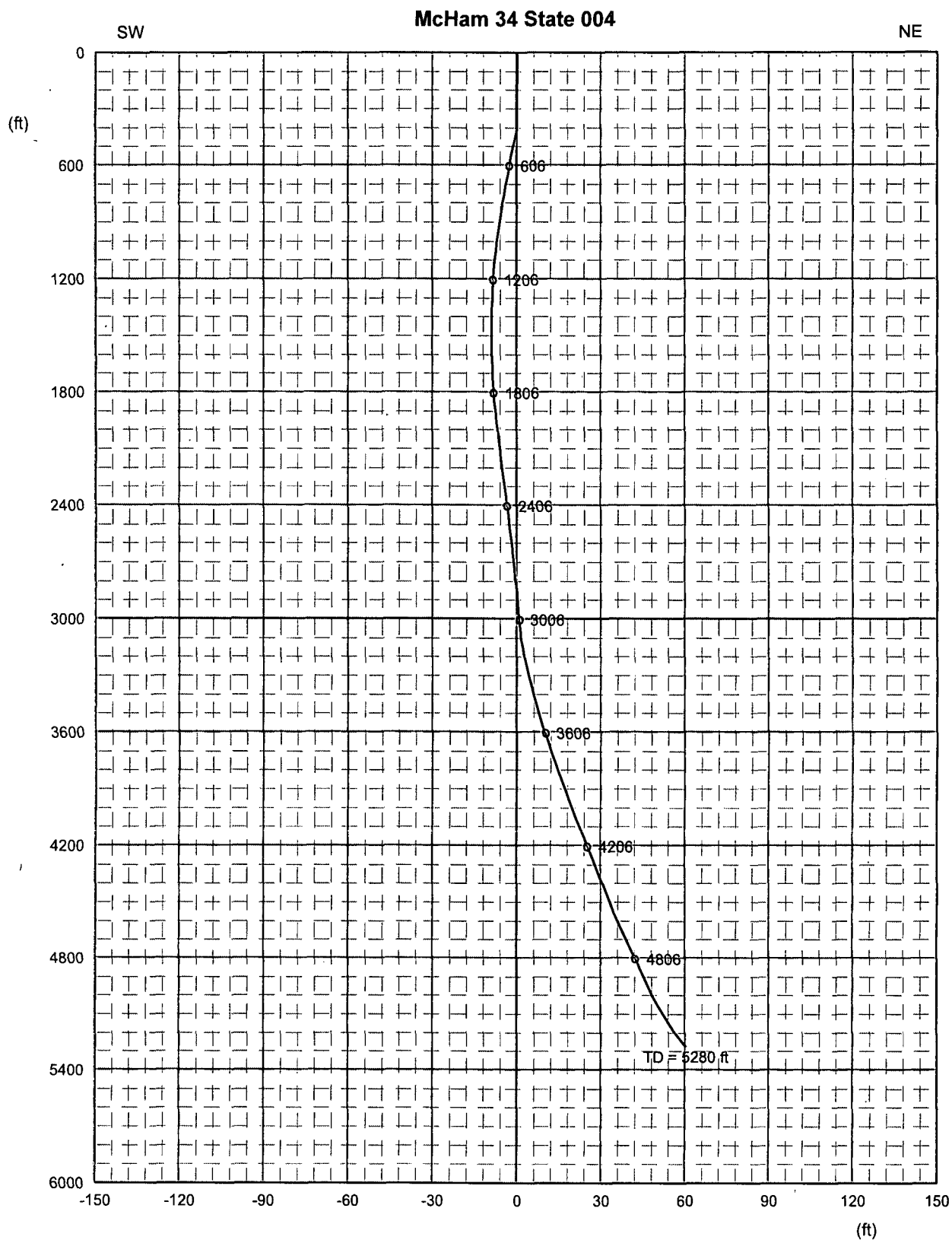
Bottom Hole Location

Measured Depth	5280.00	ft
True Vertical Depth	5277.66	ft
Distance North	115.29	ft
Distance East	-29.99	ft
Closure Distance	119.13	ft
Closure Direction	345.42	deg



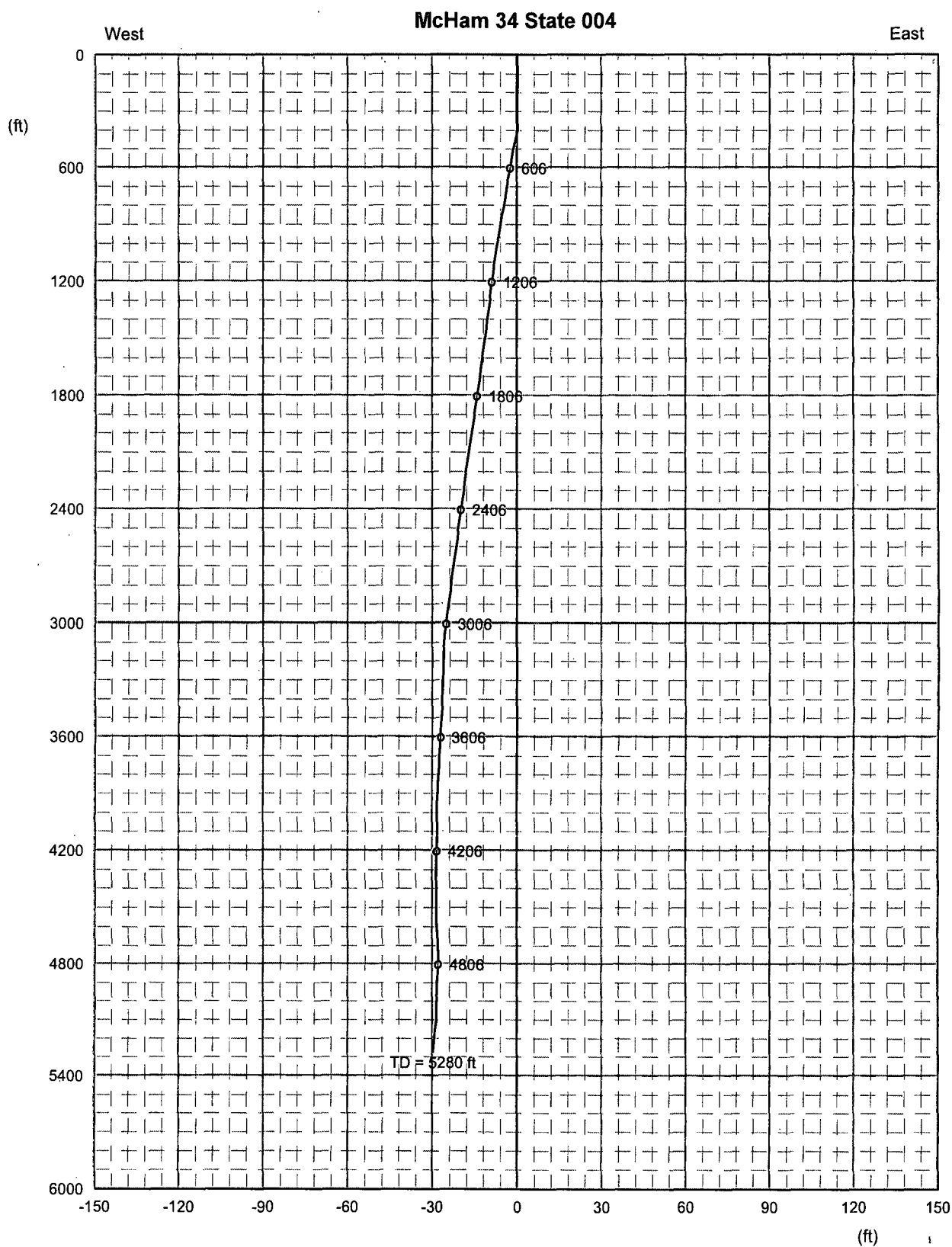
Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 50 ft



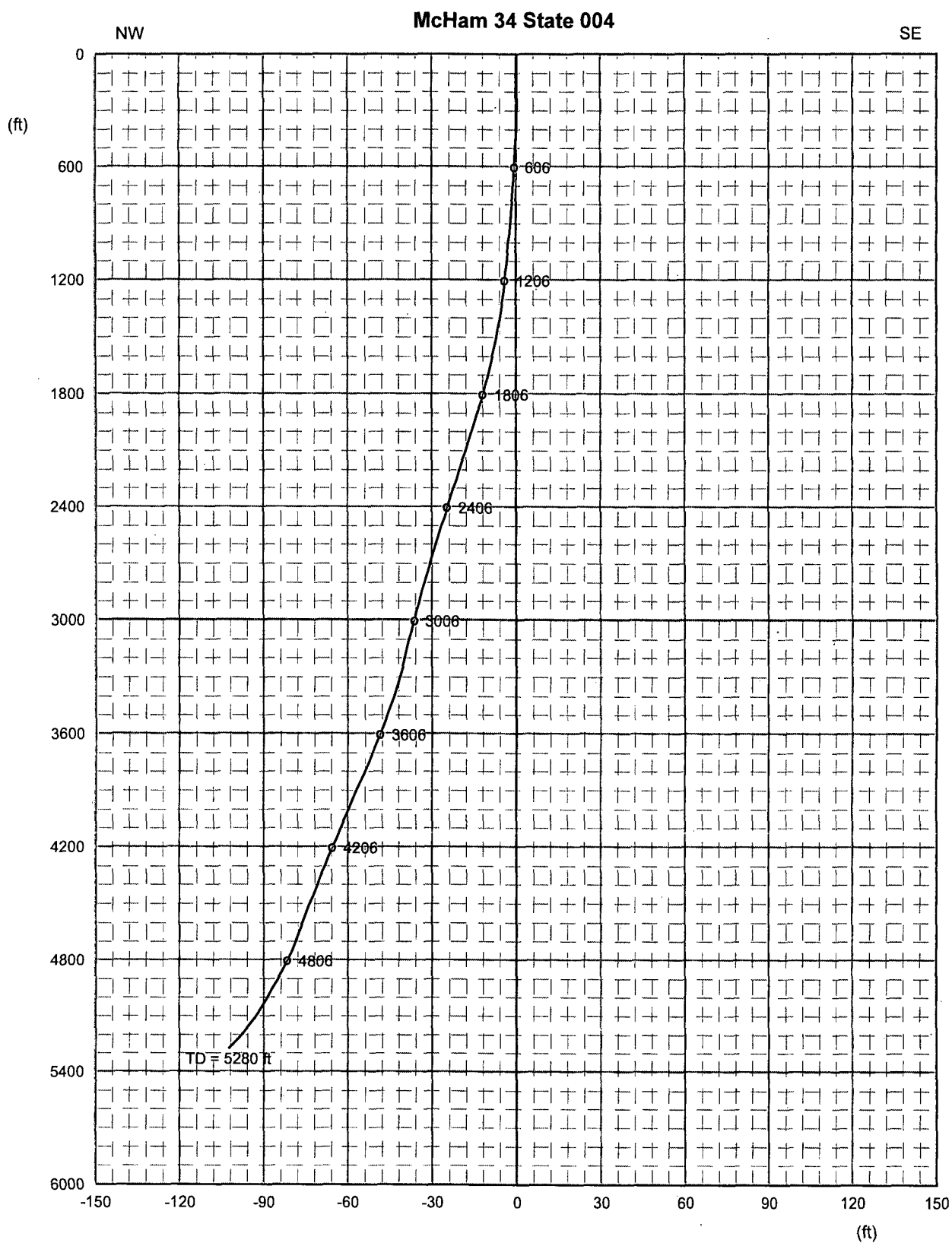
Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 50 ft



Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 50 ft



Projection on Vertical Plane

Vertical scale 1 in : 750 , Horizontal scale 1 in : 50 ft

MD (ft)	TVD (ft)	DEVI (deg)	AZIM (deg)	DX (ft)	DY (ft)
0.00	0.00	0.00	0.00	0.00	0.00
400.00	400.00	0.00	0.00	0.00	0.00
406.00	406.00	0.84	246.05	-0.04	-0.02
456.00	455.99	1.05	246.52	-0.79	-0.35
506.00	505.99	0.79	242.08	-1.52	-0.69
556.00	555.98	0.67	237.75	-2.07	-1.01
606.00	605.98	0.71	240.56	-2.59	-1.32
656.00	655.97	0.72	238.40	-3.13	-1.64
706.00	705.97	0.72	241.06	-3.67	-1.95
756.00	755.97	0.74	245.27	-4.24	-2.24
806.00	805.96	0.71	249.65	-4.83	-2.48
856.00	855.96	0.66	251.49	-5.39	-2.68
906.00	905.96	0.73	255.98	-5.97	-2.85
956.00	955.95	0.68	259.99	-6.57	-2.98
1006.00	1005.95	0.62	265.85	-7.13	-3.05
1056.00	1055.95	0.59	267.31	-7.66	-3.08
1106.00	1105.94	0.52	269.61	-8.14	-3.10
1156.00	1155.94	0.49	272.79	-8.58	-3.09
1206.00	1205.94	0.50	281.61	-9.01	-3.03
1256.00	1255.94	0.49	296.55	-9.42	-2.89
1306.00	1305.94	0.56	303.80	-9.81	-2.66
1356.00	1355.93	0.59	308.62	-10.21	-2.37
1406.00	1405.93	0.64	309.75	-10.63	-2.03
1456.00	1455.93	0.64	313.66	-11.05	-1.66
1506.00	1505.92	0.75	313.50	-11.49	-1.24
1556.00	1555.92	0.76	319.70	-11.94	-0.76
1606.00	1605.91	0.92	321.68	-12.40	-0.19
1656.00	1655.91	0.91	322.32	-12.89	0.44
1706.00	1705.90	1.06	329.03	-13.37	1.15
1756.00	1755.89	0.99	326.79	-13.85	1.90
1806.00	1805.88	1.23	330.39	-14.35	2.73
1856.00	1855.87	1.23	332.85	-14.86	3.67
1906.00	1905.86	1.30	333.21	-15.36	4.66
1956.00	1955.85	1.30	334.99	-15.85	5.68
2006.00	2005.83	1.20	335.98	-16.31	6.67
2056.00	2055.82	1.30	335.15	-16.76	7.67
2106.00	2105.81	1.32	335.69	-17.23	8.71
2156.00	2155.80	1.35	334.90	-17.72	9.76
2206.00	2205.78	1.33	336.48	-18.20	10.83
2256.00	2255.77	1.31	338.77	-18.64	11.90
2306.00	2305.76	1.32	340.27	-19.05	12.97
2356.00	2355.74	1.33	335.07	-19.48	14.04
2406.00	2405.73	1.35	335.87	-19.97	15.11
2456.00	2455.72	1.27	335.37	-20.44	16.15

2506.00	2505.70	1.26	336.81	-20.89	17.15
2556.00	2555.69	1.28	336.02	-21.33	18.17
2606.00	2605.68	1.30	335.85	-21.79	19.19
2656.00	2655.67	1.27	333.83	-22.26	20.21
2706.00	2705.65	1.23	333.07	-22.75	21.18
2756.00	2755.64	1.13	335.79	-23.20	22.11
2806.00	2805.63	1.09	333.82	-23.61	22.99
2856.00	2855.62	1.17	336.02	-24.03	23.88
2906.00	2905.61	1.21	333.64	-24.47	24.82
2956.00	2955.60	1.04	332.17	-24.91	25.70
3006.00	3005.60	1.04	333.28	-25.33	26.50
3056.00	3055.59	1.16	336.82	-25.73	27.37
3106.00	3105.58	1.11	345.70	-26.05	28.30
3156.00	3155.57	1.08	359.63	-26.17	29.24
3206.00	3205.56	1.24	354.08	-26.23	30.25
3256.00	3255.54	1.34	353.05	-26.36	31.37
3306.00	3305.53	1.45	354.80	-26.49	32.58
3356.00	3355.51	1.59	356.95	-26.58	33.90
3406.00	3405.49	1.63	354.67	-26.68	35.30
3456.00	3455.47	1.75	354.11	-26.83	36.77
3506.00	3505.45	1.85	352.80	-27.01	38.33
3556.00	3555.42	1.99	353.72	-27.20	40.00
3606.00	3605.39	1.92	351.38	-27.42	41.69
3656.00	3655.36	1.94	357.56	-27.58	43.36
3706.00	3705.33	2.03	358.97	-27.64	45.10
3756.00	3755.30	2.05	353.82	-27.75	46.87
3806.00	3805.26	2.27	352.26	-27.98	48.74
3856.00	3855.22	2.25	354.28	-28.21	50.70
3906.00	3905.19	2.20	358.34	-28.34	52.64
3956.00	3955.15	2.24	357.06	-28.41	54.57
4006.00	4005.11	2.15	357.24	-28.51	56.49
4056.00	4055.08	2.24	359.38	-28.56	58.40
4106.00	4105.04	2.23	359.89	-28.58	60.35
4156.00	4155.00	2.32	1.25	-28.56	62.33
4206.00	4204.96	2.28	357.43	-28.58	64.34
4256.00	4254.92	2.27	357.82	-28.66	66.32
4306.00	4304.88	2.18	0.40	-28.69	68.27
4356.00	4354.84	2.17	0.67	-28.68	70.17
4406.00	4404.81	2.13	0.33	-28.66	72.05
4456.00	4454.78	2.12	357.80	-28.69	73.90
4506.00	4504.74	2.09	357.16	-28.77	75.73
4556.00	4554.71	2.16	5.25	-28.73	77.58
4606.00	4604.67	2.24	6.55	-28.53	79.49
4656.00	4654.63	2.35	4.67	-28.34	81.48
4706.00	4704.59	2.36	3.92	-28.18	83.53
4756.00	4754.54	2.44	5.27	-28.01	85.62

4806.00	4804.50	2.38	356.06	-27.99	87.71
4856.00	4854.45	2.69	354.30	-28.18	89.91
4906.00	4904.39	2.80	355.98	-28.38	92.30
4956.00	4954.34	2.68	353.83	-28.59	94.68
5006.00	5004.28	2.90	358.60	-28.75	97.11
5056.00	5054.21	3.17	359.52	-28.79	99.75
5106.00	5104.12	3.61	357.28	-28.87	102.70
5156.00	5154.01	3.98	354.17	-29.13	106.00
5206.00	5203.88	4.17	354.46	-29.48	109.54
5256.00	5253.74	4.63	355.12	-29.82	113.36
5280.00	5277.66	4.63	355.12	-29.99	115.29
MD (ft)	TVD (ft)	DEVI (deg)	AZIM (deg)	DX (ft)	DY (ft)

COMPANY: Occidental Permian LTD

WELL: McHam 34 State 004

FIELD: Yeso

STATE: New Mexico

COUNTRY: USA

Date Logged: 23-Mar-2014 Date Processed: 27-Mar-2013

Well Location: 2105' FNL & 2233' FEL

Elevations: K.B. 3692 ft D.F. 3691 ft G.L. 3678 ft

API Number: 30-015-41233 Job Number: DSP-2014-09953

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name MCHAM "34" STATE	Well Number 4
OGRID No.	Operator Name OCCIDENTAL PERMIAN LIMITED PARTNERSHIP	Elevation 3664.6'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	34	17 SOUTH	28 EAST, N.M.P.M.		2105'	NORTH	2233'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code	Order No.					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____ E-mail Address _____
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JERRY J. ASH PROFESSIONAL LAND SURVEYOR (15079) AUGUST 7, 2012 Date of Survey _____ Signature and Seal of Professional Surveyor _____ <i>Jerry J. Ash</i> 9/6/2012 Certificate Number 15079
	WO# 120807WL-C (KA)

Schlumberger

McHam 34 State 004

General Information:

Company Name: Occidental Permian LTD
Field: Yeso
Well: McHam 34 State 004
County: Eddy
State: New Mexico
Surface Location: 2105' FNL & 2233' FEL
Latitude: 32.79260 deg N
Longitude: 104.16220 deg W
API Number: 30-015-41233
Logging Engineer: Ken Rood
Processed By: Elizabeth Rosborough
Service Order Number: CFNV-00087
Job Number: DSP-2014-09953
Date Logged: 23-Mar-2014
Date Processed: 27-Mar-2014

Bottom Hole Location:

Measured Depth	True Vertical Depth	North/South Drift	East/West Drift	Closure Distance	Closure Direction
Ft	Ft	Ft	Ft	Ft	Deg
5280.00	5277.66	115.29	-29.99	119.13	345.42